

(19) World Intellectual Property
Organization
International Bureau



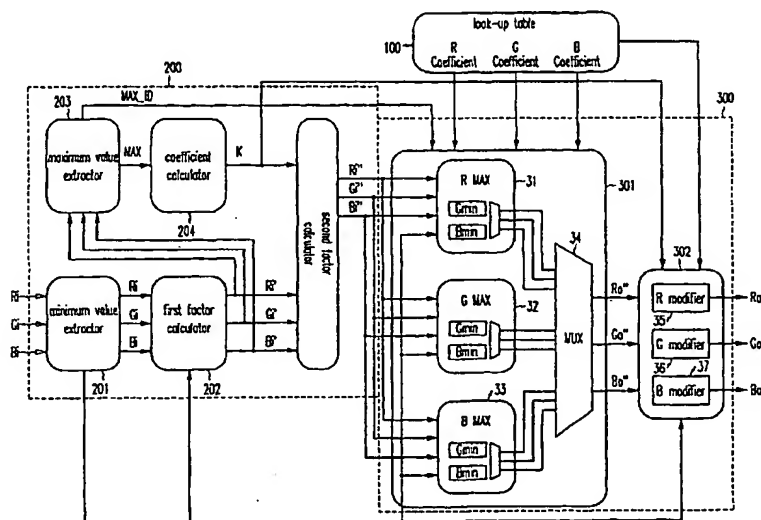
(43) International Publication Date
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number
WO 2004/002167 A1

- (51) International Patent Classification⁷: **H04N 9/73**
- (21) International Application Number:
PCT/KR2002/001768
- (22) International Filing Date:
18 September 2002 (18.09.2002)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:
2002/34905 21 June 2002 (21.06.2002) KR
- (71) Applicant (for all designated States except US): SAM-
SUNG ELECTRONICS CO., LTD. [KR/KR]; 416,
Maetan-dong, Paldal-ku, 442-370 Suwon-city, Kyungki-do
(KR).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): PARK, Cheol-Woo
[KR/KR]; Daedong Villa 102-405, 1216-1, Maetan 2-dong,
Paldal-ku, 442-807 Suwon-city, Kyungki-do (KR).
- (74) Agent: YOU ME PATENT & LAW FIRM; Teheran
Bldg., 825-33, Yoksam-dong, Kangnam-ku, 135-080
Seoul (KR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK,
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: COLOR CALIBRATOR FOR FLAT PANEL DISPLAY AND METHOD THEREOF



(57) **Abstract:** The present invention relates to a device and a method of color correction for a flat panel display capable of realizing color productivity compared to CRT, a broadcasting standard. The present invention divides the color coordinates of received image signals into nine subareas before color correction and stores a plurality of conversion distance information obtained by matching the divided subareas with divided subareas for reference color coordinates and corrected values for the image signals. Subsequently, the present invention converts the image signals by converting the conversion distance information by using interpolation and extracts the corrected values depending on the converted image signals to correct the image signals. Accordingly, the flat panel display according to the embodiments of the present invention displays standard broadcasting image signals with color reproducibility to a maximum color range that the flat panel display can reproduce but without distorting colors.